

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT <i>ENGINEERING & COMPLIANCE</i> APPLICATION PROCESSING AND CALCULATIONS	PAGES 14	PAGE NO. 1
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ENGINEERING EVALUATION

COMPANY NAME AND ADDRESS

PurEnergy Operating Services, LLC
1732 West Genesee Street
Syracuse, NY 13204

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Rodney Lee, Plant Manager, (909) 824-2202
Joel Lepourte, Asset Manager, (714) 746-5960
Jeff Adkins, Sierra Research, (916) 273-5127

EQUIPMENT LOCATION

AQMD ID 132191 (Century Power Plant)
661 S. Cooley Drive
Colton, CA 92324

EQUIPMENT DESCRIPTION

Section D of the facility permit: Permit to Operate

The changes to Section D will be shown with a ~~striketrough~~ for deletions and an **underline** for additions.

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
Process 1: INTERNAL COMBUSTION					
System 1: Power Generation, Unit No. 1					
GAS TURBINE NO. 1, NATURAL GAS, GENERAL ELECTRIC, MODEL 10B1, SIMPLE CYCLE, 136.5 MMBTU/HR WITH A/N 463514 <u>518575</u>	D1	C4 C5	NOX: MAJOR SOURCE	CO: 2000 PPMV (5) [RULE 407]; CO: 6 PPMV NATURAL GAS (4) [RULE 1303 – BACT] NOX: 5 PPMV NATURAL GAS (4) [RULE 2005]; NOX: 79 PPMV NATURAL GAS (8) [40 CFR 60 SUBPART GG] PM: 11 LBS/HR (5A) [RULE 475]; PM: 0.01 GRAINS/SCF (5B) [RULE 475]; PM: 0.1 GRAINS/SCF (5) [RULE 409] SOX: 150 (8) [40 CFR 60 SUBPART GG] VOC: 2 PPMV NATURAL GAS (4) [RULE 1303 – BACT]	A63.1, A63.2, A99.1, A99.2, A99.5, A195.1, A195.2, A327.1, C1.1, C1.2, D12.1, D12.2, D29.1, D82.1, D82.2, E57.1, <u>E313.1</u> , <u>E315.1</u> , E481.1, H23.1, <u>1296.1</u>
GENERATOR, NO. 1, 10.5 MW					

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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
CO OXIDATION CATALYST, NO.1, SERVING GAS TURBINE NO. 1, TECNIP OR EQUIVALENT, PRECIOUS METAL (PD, PT) ON METAL FOIL, WITH 40-50 CU. FT. OF TOTAL CATALYTIC VOLUME, HT. 22 FT X 13.5 X 10.5 FT A/N: 400855	C4	D1 C5			
SELECTIVE CATALYTIC REDUCTION, NO.1, SERVING GAS TURBINE NO. 1, TECNIP, MONO-NOX VANADIA/TITANIA, 275 CU. FT.; WIDTH: 10 FT 6 IN; HEIGHT: 22 FT; LENGTH: 13 FT 6 IN WITH A/N 400855 AMMONIA INJECTION, GRID	C5	D1 C4		NH3: 5 PPMV (4) [RULE 1303 – BACT]	A99.3, A195.3, D12.3, D12.4, D12.5, D28.1, E73.1, E179.1, E179.2
STACK NO. 1 A/N 463514 <u>518575</u>	S7				
System 2: Power Generation, Unit No. 2					
GAS TURBINE NO. 2, NATURAL GAS, GENERAL ELECTRIC, MODEL 10B1, SIMPLE CYCLE, 136 MMBTU/HR WITH A/N 463517 <u>518576</u>	D8	C11 C12	NOX: MAJOR SOURCE	CO: 2000 PPMV (5) [RULE 407]; CO: 6 PPMV NATURAL GAS (4) [RULE 1303 – BACT] NOX: 5 PPMV NATURAL GAS (4) [RULE 2005]; NOX: 79 PPMV NATURAL GAS (8) [40 CFR 60 SUBPART GG] PM: 11 LBS/HR (5A) [RULE 475]; PM: 0.01 GRAINS/SCF (5B) [RULE 475]; PM: 0.1 GRAINS/SCF (5) [RULE 409] SOX: 150 (8) [40 CFR 60 SUBPART GG] VOC: 2 PPMV NATURAL GAS (4) [RULE 1303 – BACT]	A63.1, A63.2, A99.1, A99.2, A99.5, A195.1, A195.2, A327.1, C1.1, C1.2, D12.1, D12.2, D29.1, D82.1, D82.2, E57.1, <u>E313.1</u> , <u>E315.1</u> , E481.1, H23.1, <u>I296.1</u>
GENERATOR, NO. 2, 10.5 MW					
CO OXIDATION CATALYST, NO.2, SERVING GAS TURBINE NO. 2, TECNIP OR EQUIVALENT, PRECIOUS METAL (PD, PT) ON METAL FOIL, WITH 40-50 CU. FT. OF TOTAL CATALYTIC VOLUME, HT. 22 FT X 13.5 X 10.5 FT A/N: 400857	C11	D8 C12			

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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
System 4: Power Generation, Unit No. 4					
GAS TURBINE NO. 4, NATURAL GAS, GENERAL ELECTRIC, MODEL 10B1, SIMPLE CYCLE, 136.5 MMBTU/HR WITH A/N 463524 <u>518578</u>	D22	C25 C26	NOX: MAJOR SOURCE	CO: 2000 PPMV (5) [RULE 407]; CO: 6 PPMV NATURAL GAS (4) [RULE 1303 – BACT] NOX: 5 PPMV NATURAL GAS (4) [RULE 2005]; NOX: 79 PPMV NATURAL GAS (8) [40 CFR 60 SUBPART GG] PM: 11 LBS/HR (5A) [RULE 475]; PM: 0.01 GRAINS/SCF (5B) [RULE 475]; PM: 0.1 GRAINS/SCF (5) [RULE 409] SOX: 150 (8) [40 CFR 60 SUBPART GG] VOC: 2 PPMV NATURAL GAS (4) [RULE 1303 – BACT]	A63.1, A63.2, A99.1, A99.2, A99.5, A195.1, A195.2, A327.1, C1.1, C1.2, D12.1, D12.2, D29.1, D82.1, D82.2, E57.1, <u>E313.1</u> , <u>E315.1</u> , E481.1, H23.1, <u>I296.1</u>
GENERATOR, NO. 2, 10.5 MW					
CO OXIDATION CATALYST, NO.4, SERVING GAS TURBINE NO. 4, TECNIP OR EQUIVALENT, PRECIOUS METAL (PD, PT) ON METAL FOIL, WITH 40-50 CU. FT. OF TOTAL CATALYTIC VOLUME, HT. 22 FT X 13.5 X 10.5 FT A/N: 400863	C25	D22 C26			
SELECTIVE CATALYTIC REDUCTION, NO.4, SERVING GAS TURBINE NO. 4, TECHNIP, MONO-NOX VANADIA/TITANIA, 275 CU. FT.; WIDTH: 10 FT 6 IN; HEIGHT: 22 FT; LENGTH: 13 FT 6 IN WITH A/N 400863 AMMONIA INJECTION, GRID	C26	D22 C25		NH3: 5 PPMV (4) [RULE 1303 – BACT]	A99.3, A195.3, D12.3, D12.4, D12.5, D28.1, E73.1, E179.1, E179.2
STACK NO. 4 A/N 463524 <u>518578</u>	S28				
Process 2: INORGANIC CHEMICAL STORAGE					
STORAGE TANK, FIXED ROOF, WITH VAPOR RETURN LINE, AQUEOUS AMMONIA 19% SOLUTION, (10,000 GALLONS OR SMALLER) A/N 400440	D29				C157.1, E144.1
Process 3: R-219 EXEMPT EQUIPMENT SUBJECT TO SOURCE-SPECIFIC RULES					
RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS	E30			ROG: (9) [RULE 1113; RULE 1171]	K67.2

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BACKGROUND

PurEnergy Operating Systems, LLC (POS) submitted change of condition applications, as well as a TV/RECLAIM application to designate the turbines at the Century Power Plant as non-operational. Table 1 below summarizes the applications submitted for the facility.

Table 1 Application Summary

A/N	Equipment	Submittal Date	Deemed Complete	BCAT/CCAT	Schedule	Fee
518579	TV/RECLAIM Revision	2/1/11	2/15/11	555012	-	\$1,723.07
518575	TURBINE ENGINE (<=50MW) EL PEAK NG ONLY	2/1/11	2/15/11	012008	D	\$3,071.35
518576	TURBINE ENGINE (<=50MW) EL PEAK NG ONLY	2/1/11	2/15/11	012008	D	\$1,535.68
518577	TURBINE ENGINE (<=50MW) EL PEAK NG ONLY	2/1/11	2/15/11	012008	D	\$1,535.68
518578	TURBINE ENGINE (<=50MW) EL PEAK NG ONLY	2/1/11	2/15/11	012008	D	\$1,535.68

The applications for change of conditions request the following:

- Designate the turbines at the Century Power Plant as non-operated major sources;
- Change from selling unused NOx RTCs on an annual basis to a quarterly basis;
- Remove the triennial and annual source testing requirement for the equipment deemed as non-operated;
- Allow the non-operated status for the Rule 218 CO CEMS similar to the Rule 2012 NOx CEMS.

POS operates the Century Power Plant as well as the Drews Power Plant (ID 132192), which is an identical power plant that has identical equipment. Applications were also submitted for the Drews plant requesting the same changes. Each request is discussed in detail below.

Rule 2012 Non-Operated Major Source

POS is requesting to be designated as a non-operated major source in accordance with Rule 2012(c)(9). A condition will be placed on the permit for the equipment fuel line to be disconnected and flanged. Approved non-operational equipment is not required to operate the NOx CEMS for daily calibrations or for quarterly linearity tests and are not required to perform annual or semi-annual CEMS assessments while rendered non-operational. The equipment must meet the monitoring requirements of Rule 2012 within 30 calendar days of start-up.

Rule 2005 NOx RTCs

The facility is requesting the ability to sell unused NOx RTCs on a quarterly basis in accordance with Rule 2012(f)(3) as opposed to on an annual basis per Rule 2005 (f)(2). In order for the facility to comply with the quarterly RTC requirement, they must accept quarterly emission limits on the permit. POS proposed to comply with quarterly emission limits of 1,164 lbs – 1st quarter, 1,164 lbs – 2nd quarter, 18,264 lbs – 3rd quarter, and 2,328 lbs – 4th quarter. The facility will still be required to hold the 23,280 lbs prior to each compliance year in accordance with Rule 2012(f)(1).

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Periodic Source Testing

In order to comply with the Rule 1303(a) BACT emission limits, the permit is conditioned for annual source testing for NH3 slip and triennial source testing for NOx, CO, ROG, and PM10. The facility is requesting not to have to perform these source tests while the turbines are non-operational. If the anniversary date for the annual NH3 slip test or the triennial pollutant tests falls on a date that the equipment is “non-operational”, then the required source test shall be completed within 45 days of start-up.

Rule 218 CO CEMS

For the purposes of BACT, the facility was required to install a CO CEMS to comply with the requirements of Rule 218. The CO CEMS has received final certification and must comply with the operational requirements and performance specifications of Rule 218.1(b)(4) for 24 hour calibrations, quarterly gas audits, and bi-annual or annual CEM assessments. The facility is requesting relief from these tests while the system is “non-operational”.

Rule 218.1 (b)(4) outlines the type and frequency of testing for CEMS that has received final certification. However, there is no provision in Rules 218 or 218.1 for equipment that is placed in a non-operational status. Therefore, in spite of being placed in non-operation status per Rule 2012, the annual Relative Accuracy Test Audit (RATA) and the system bias test, to be performed on an annual basis, would still be required. In essence, performing the Rule 218 tests would cause the equipment to become operational and the facility would lose the “non-operational” classification for the turbines.

Since there is no provision in the rules that allows the CEMS testing to cease for non-operated equipment, relief from the rule requirements can only come from the authority of the Hearing Board. The facility has a petition before the Hearing Board that addresses this; regular variance case nos. 5227-8 (facility ID 132192) & 5227-9 (facility ID 132191).

COMPLIANCE REVIEW

There is no record of any Notices to Comply or Notices of Violation that have been issued to the facility in the last two years.

EMISSION CALCULATIONS

There are no changes in emissions associated with the change in conditions.

RULES EVALUATION

RULE 212-STANDARDS FOR APPROVING PERMITS AND ISSUING PUBLIC NOTICES

Rule 212 requires that a person shall not build, erect, install, alter, or replace any equipment, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants without first obtaining written authorization for such construction from the Executive Officer. Rule 212(c) states that a project requires written notification if there is an emission increase for ANY criteria pollutant in excess of the daily maximums specified in Rule 212(g), if the equipment is located within 1,000 feet of the outer boundary of a school, or if the MICR is equal

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to or greater than one in a million (1×10^6) during a lifetime (70 years) for facilities with more than one permitted unit, source under Regulation XX, or equipment under Regulation XXX, unless the applicant demonstrates to the satisfaction of the Executive Officer that the total facility-wide maximum individual cancer risk is below ten in a million (10×10^6) using the risk assessment procedures and toxic air contaminants specified under Rule 1402; or, ten in a million (10×10^6) during a lifetime (70 years) for facilities with a single permitted unit, source under Regulation XX, or equipment under Regulation XXX. There are no changes in emissions in emissions associated with the change in conditions; therefore, a public notice for Rule 212 is not required.

RULE 401 - VISIBLE EMISSIONS

This rule limits visible emissions to an opacity of less than 20 percent (Ringelmann No.1), as published by the United States Bureau of Mines. It is unlikely, with the use of the SCR /CO catalyst configuration on natural gas turbines that there will be visible emissions. However, in the unlikely event that visible emissions do occur, anything greater than 20 percent opacity is not expected to last for greater than 3 minutes. During normal operation, no visible emissions are expected. Therefore, based on the above and on experience with other natural gas fired turbines, compliance with this rule is expected. In addition, non-operation will mean no emissions at all.

RULE 402 - NUISANCE

This rule requires that a person not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which cause, or have a natural tendency to cause injury or damage to business or property. The turbines are not expected to create a public nuisance based on experience with identical natural gas fired turbines. A review of the District Compliance database indicates that no nuisance complaints have been received in regards to this facility. No nuisance is expected for non-operational equipment.

RULE 407 – LIQUID AND GASEOUS AIR CONTAMINANTS

This rule limits CO emissions to 2,000 ppmvd and SO₂ emissions to 500 ppmvd, averaged over 15 minutes. For CO, the limit is 6.0 ppmvd @ 15% O₂, 1-hr average, verified through source test and CEMS data. For SO₂, equipment which complies with Rule 431.1 is exempt from the SO₂ limit in Rule 407. The applicant will be required to comply with Rule 431.1 and thus the SO₂ limit in Rule 407 will not apply.

RULE 409 – COMBUSTION CONTAMINANTS

This rule restricts the discharge of contaminants from the combustion of fuel to 0.1 grain per cubic foot of gas, calculated to 12% CO₂, averaged over 15 minutes. Continued compliance with this rule is expected. In addition, there will be no emissions while the equipment will be non-operational.

RULE 431.1-SULFUR CONTENT OF GASEOUS FUELS

The turbines will use pipeline quality natural gas which will comply with the 16 ppm sulfur limit, calculated as H₂S, specified in this rule. Natural gas will be supplied by the Southern California Gas Company which has a H₂S content of less 0.25 gr/100scf, which is equivalent to a concentration of about 4 ppm. It is also much less than the 1 gr/100scf limit typical of pipeline quality natural gas. Continued compliance is expected. In addition, there will be no emissions while the equipment will be non-operational.

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RULE 475-ELECTRIC POWER GENERATING EQUIPMENT

This rule applies to power generating equipment greater than 10 MW installed after May 7, 1976. Requirements are that the equipment meet a limit for combustion contaminants of 11 lbs/hr or 0.01 gr/scf. Continued compliance with this rule is expected. In addition, there will be no emissions while the equipment will be non-operational.

RULE 1134 – EMISSIONS OF OXIDES OF NITROGEN FROM GAS TURBINES

This rule applies to gas turbines, 0.3 MW and larger, installed on or before August 4, 1989. The units were installed after the date of applicability; therefore, the requirements of this rule are not applicable.

RULE 1135 – EMISSIONS OF OXIDES OF NITROGEN FROM ELECTRIC POWER GENERATING SYSTEMS

This rule applies to the electric power generating systems of several of the major utility companies in the basin. The plants which are included in the RECLAIM program are no longer subject to the requirements of this rule. Therefore, the NOx requirements of this rule are not applicable to the turbines.

40CFR PART 60 SUBPART GG – STANDARDS OF PERFORMANCE FOR STATIONARY GAS TURBINES

The turbines are rated at 136.5 MMBtu/hr; therefore, they are subject to the requirements of this subpart. The turbines are dry low NOx and were constructed in 2001. The applicable requirements for non-operational status is §60.334(c) which states "... if the owner or operator submitted and received EPA, State, or local permitting authority approval of a procedure for monitoring compliance with the applicable NOx emission limit under §60.332, that approved procedure may continue to be used". As the local permitting authority, AQMD evaluated the facility's CEMS certification report and RATA reports and determined that the equipment complied with Rule 2012. Written notification of final CEMS approval was sent to the facility on June 21, 2006. Since the equipment will comply with Rule 2012(c)(9) – non-operational status, continued compliance with this subpart is expected.

REGULATION XX – REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)

The facility is in NOx RECLAIM and in cycle 1.

RULE 2005 – NEW SOURCE REVIEW FOR RECLAIM

The facility requested that they be able to sell their unused RTCs at end of each quarter as opposed to the end of each fourth quarter. In order to facilitate the request, section (f)(3) requires the facility to accept quarterly emission limits on the permit. POS proposed quarterly limits in their application that would allow them to comply with quarterly sale of unused RTCs.

RULE 2012 – REQUIREMENTS FOR MONITORING, REPORTING, AND RECORDKEEPING FOR OXIDES OF NITROGEN (NOx) EMISSIONS

The turbines are NOx Major Sources under RECLAIM and are required to have CEMS under Rule 2012. The CEMS received final certification on June 21, 2006 and the equipment has been operating in compliance with the rule.

The requirements to install, maintain, and operate a NOx CEMS are not applicable if the unit is classified as a non-operated major source as outlined in Rule 2012(c)(9). The facility submitted applications for change of conditions to categorize the equipment as "non-operational". The equipment

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has not previously been classified as a non-operated major source within the last 18 months. The facility has opted to comply by disconnecting the fuel feed lines and placing flanges at both ends of the disconnected lines and by rendering the equipment non-operational. The facility will be required to notify the District in writing no later than 30 days from the start of operation. In the event that any turbine is operated, the facility must perform RATA within 14 operating days from the start of operation.

REGULATION XXX – TITLE V

The facility is a major source for NOx and has Title V permit. Their request to go “non-operational” and to change to quarterly sale of NOx RTCs is considered a “minor revision”.

RULE 3003 - APPLICATIONS

The “minor permit revision” is expected to comply with all applicable requirements of this rule.

(i)(4) The minor revision will be issued only after the permit revision application has been found to comply with all conditions of this rule.

(j) EPA review will be required for the minor revision.

RULE 3005 – PERMIT REVISIONS

(c) The proposed minor permit revision satisfies all the applicable conditions listed in this rule. The modification constitutes an “minor permit revision” as defined in Rule 3000(b)(12).

RULE 3006 – PUBLIC PARTICIPATION

(b) The proposed “minor permit revision” is exempt from public participation.

PERMIT CONDITIONS

Only the changes are shown below. The new conditions are underlined and the conditions that will be removed will have a ~~striketrough~~. The existing modified conditions will also have underlines and ~~striketroughs~~ to represent additions and deletions, respectively.

FACILITY PERMIT CONDITIONS

~~F2.1~~ The operator shall limit emissions from this facility as follows:

<u>CONTAMINANT</u>	<u>EMISSION LIMIT</u>
<u>NOx</u>	Less than or equal to 23280 LBS IN ANY ONE MONTH

PurEnergy shall possess, prior to each compliance year, NOx RTCs in the amount of 23,280 lbs for the upcoming compliance year.

The emission limit applies based on a calendar year basis for each compliance year.

In addition, this facility shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the first RECLAIM compliance year, the facility holds sufficient RTC's in the amount equal to the annual emissions increase.

[~~RULE 2005~~]

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CONDITION D

I296.1 This equipment shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the annual emissions increase for the first 12 months of operation. In addition, this equipment shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the start of operation, the facility holds sufficient RTCs in an amount equal to the annual emissions increase.

For the purposes of this condition, the annual emission increase is 23,280 lbs. of NO_x;

RTCs held for the purpose of demonstrating compliance with this condition either at the commencement of initial operation or of a compliance year may be sold only after 12 months of start of initial operation or after the fourth quarter of the applicable compliance year, respectively.

In lieu of holding RTCs for the entire duration specified above, RTCs held for the purpose of demonstrating compliance with this condition may be sold as specified below, provided quarterly emission does not exceed the corresponding quarterly limit listed in the table below. The amount available for sale shall be the quarterly emission limit listed minus the actual emission reportable pursuant to RECLAIM Monitoring, Recordkeeping, and Reporting protocols. Such amount may be sold only after the end of the subject quarter. If the quarterly certified emissions for any quarter exceed the corresponding quarterly emission limit, the facility may only sell RTCs acquired pursuant to Rule 2005(f) for that compliance year after the fourth quarter of that compliance year. This early sale option shall permanently be unavailable in the event that quarterly emissions exceeded the corresponding quarterly limits for a total of 3 times in any five consecutive years.

<u>Calendar Quarter</u>	<u>Emission Limit (lbs.)</u>
<u>January 1 through March 31</u>	<u>1,164</u>
<u>April 1 through June 30</u>	<u>1,164</u>
<u>July 1 through September 30</u>	<u>18,624</u>
<u>October 1 through December 31</u>	<u>2,328</u>

In lieu of complying with an emission increase of 23280 pounds of NO_x, the emission increase shall be 0 lbs of NO_x while the device is complying fully with Condition E313.1 which lists the terms for non-operational status.

[Rule 2005]

[Devices subject to this condition: D1, D8, D15, D22]

E313.1 This device is classified as a non-operated major NO_x source as defined under Rule 2012 and shall not be operated unless the facility permit holder provides written notification to the Executive Officer 30 days prior to starting operation. In order to maintain the non-operational status, the Facility Permit holder shall:

- (a) Remove a section of fuel feed line(s) to the device and place a blind flange on both ends of the fuel feed line(s); and
- (b) Remove a major component of the source necessary for its operation.

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Removal of parts or components solely to qualify the device for non-operated classification pursuant to this condition, or replacement of the same parts or components resulting in the device no longer being classified as non-operated shall be not be deemed to affect the potential to emit within the meanings of Rule 2005, Regulation XIII, and Regulation XXX.

This device shall not be operated unless the Facility Permit Holder submits a complete application for change of condition to remove this condition from the facility permit 30 days prior to starting operation.

For the purposes of complying with condition I296.1 while the device is complying with a non-operational status, a NOx annual emissions increase of 0 pounds shall be used due to non-operational status. This 0 pound emission increase shall become void once the subject device is operated and the operator shall fully comply with Condition I296.1 for the current compliance year without proration of the of the specified emission increase amount prior to commencing operation.

[RULE 2012]

[Devices subject to this condition: D1, D8, D15, D22]

E315.1 Once this device is operated, it shall no longer be classified as non-operational. This device shall also meet the monitoring requirements of Rule 2012, subparagraph (c)(2)(A) or (c)(2)(B) no later than 30 calendar days after the start of operation except as provided in Rule 2012, paragraph (c)(10).

[RULE 2012]

[Devices subject to this condition: D1, D8, D15, D22]

D28.1 The operator shall conduct source test(s) in accordance with the following specifications:

The test shall be conducted and the results submitted to the District within 60 days after the test date.

The test shall be conducted at least quarterly during the first twelve months of operation and at least annually thereafter.

The District shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to demonstrate compliance with Rule 1303 concentration limit.

The test shall be conducted to determine the NH3 emissions using District Method 207.1 and 5.3 or EPA Method 17 measured over a 60-minute averaging time period. The NOx concentration, as determined by reading the CEMS, shall be simultaneously recorded during the test. If CEMS is inoperable, a test shall be conducted to determine the NOx emissions using District Method 100.1 measured over a 60-minute averaging time period.

Source test shall be conducted when this equipment is operating. The annual source test shall not be required during the period of time that the turbine, to which this control system is connected, is non-operational. For the purposes of this condition, non-operation shall be defined as zero fuel flow to the turbine verified by the removal of a section of fuel feed line(s) and the placement of a blind flange at each end of the fuel feed line(s). The source test shall be performed within 45 calendar days from the day the turbine first fires fuel.

[Rule 1303(a)(1) – BACT]

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[Devices subject to this condition: C5, C12, C19, C26]

D29.1 The operator shall conduct source test(s) for the pollutants identified below:

Pollutant to be tested	Required Test Method(s)	Averaging Time	Test Location
CO emissions	District Method 100.1	1 hour	Outlet of the SCR serving this equipment
NOx emissions	District Method 100.1	1 hour	Outlet of the SCR serving this equipment
PM10 emissions	District Method 5.2 Modified with EPA Method 201A Cyclone (filterables compliance, condensables information)	1 hour	Outlet of the SCR serving this equipment
ROG emissions	Approved District method	1 hour	Outlet of the SCR serving this equipment

The test shall be conducted at least once every three years and as per District approved protocol. Within 60 days after the source test, the operator shall submit the source test report to the District.

Source test shall be conducted when this equipment is operating. The source test shall not be required during the period of time that the turbine is non-operational. For the purposes of this condition, non-operation shall be defined as zero fuel flow to the turbine verified by the removal of a section of fuel feed line(s) and the placement of a blind flange at each end of the fuel feed line(s). The source test shall be performed within 45 calendar days from the day the turbine first fires fuel.

[Rule 1303(a)(1) – BACT, RULE 2005]

[Devices subject to this condition: D1, D8, D15, D22]

A195.3 The 5 ppmv NH₃ emission limit(s) is averaged over 60 mins at 15 percent O₂ dry. The operator shall calculate and continuously record the NH₃ slip concentration using the following: $NH_3 \text{ (ppmv)} = [a - (b * (c * 1.2)/1000000)] * (1000000/b)$, where a = NH₃ injection rate (lb/hr)/(17 lb/lb-mole), b = dry exhaust gas flow rate (lb/hr)/(29 lb/lb-mole) and c = change in measured NO_x across the SCR (ppmvd at 15 percent O₂).

The operator shall install and maintain a NO_x analyzer to measure the SCR inlet NO_x ppmv accurate to plus or minus 5 percent and calibrated at least once every 12 months.

The determination of ammonia slip based on the above formula shall be adjusted with correction factors. The operator shall determine a equipment-specific procedure for the correction of the formula by comparing the results of the formula with the actual ammonia slip measurement during the performance testing. New correction factors and any changes to the factors are subject to AQMD approval.

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The operator shall use the above described method or another alternative method approved by the Executive Officer.

The ammonia slip calculation procedure described above shall not be used for compliance determination or emission information without corroborative data using an approved reference method for determination of ammonia.

The maintenance of the NOx analyzer and the requirement to calculate and continuously record NH3 slip concentration shall not be required during the period of time that the turbine, to which this control system is connected, is non-operational.

For the purposes of this condition, non-operation shall be defined as zero fuel flow to the turbine verified by the removal of a section of fuel feed line(s) and the placement of a blind flange at each end of the fuel feed line(s). NOx analyzer maintenance and NH3 slip recording shall commence on the day the turbine first fires fuel.

[Rule 1303(a)(1) – BACT]

[Devices subject to this condition: C5, C12, C19, C26]

- D12.3 The operator shall install and maintain a(n) flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia (NH3).

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The operator shall maintain the ammonia injection rate between 1 and 7 lbs per hour.

The requirements to continuously record ammonia flow shall not be required during the period of time that the turbine, to which this control system is connected, is non-operational. For the purposes of this condition, non-operation shall be defined as zero fuel flow to the turbine verified by the removal of a section of fuel feed line(s) and the placement of a blind flange at each end of the fuel feed line(s). Ammonia flow recording shall commence on the day the turbine first fires fuel.

[Rule 1303(a)(1) – BACT]

[Devices subject to this condition: C5, C12, C19, C26]

- D12.4 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature of the exhaust at the inlet to the SCR reactor.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The requirements to continuously record temperature shall not be required during the period of time that the turbine, to which this control system is connected, is non-operational. For the purposes of this condition, non-operation shall be defined as zero fuel flow to the turbine

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verified by the removal of a section of fuel feed line(s) and the placement of a blind flange at each end of the fuel feed line(s). Temperature recording shall commence on the day the turbine first fires fuel.

[Rule 1303(a)(1) – BACT]

[Devices subject to this condition: C5, C12, C19, C26]

- D12.5 The operator shall install and maintain a(n) pressure gauge to accurately indicate the pressure across the SCR reactor bed in inches of water column.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The operator shall maintain the pressure drop across the SCR bed between 2 and 5 inches of water column.

The requirements to continuously record pressure shall not be required during the period of time that the turbine, to which this control system is connected, is non-operational. For the purposes of this condition, non-operation shall be defined as zero fuel flow to the turbine verified by the removal of a section of fuel feed line(s) and the placement of a blind flange at each end of the fuel feed line(s). Pressure recording shall commence on the day the turbine first fires fuel.

[Rule 1303(a)(1) – BACT]

[Devices subject to this condition: C5, C12, C19, C26]

- D82.2 The operator shall install and maintain a CEMS to measure the following measures:

NOx concentration in ppmv

The CEMS shall be installed and operating no later than 12 months after the initial start-up of the turbine. During the interim period between the initial start-up and the provisional certification date of the CEMS, the operator shall comply with the monitoring requirements of Rule 2012(h)(2) and 2012(h)(3). Within 2 weeks of the turbine start-up date, the operator shall provide written notification to the District of the exact start-up date.

The NOx CEMS shall be installed, maintained and operated in the accordance with the requirements of Rule 2012, including the requirements of Rule 2012 (c)(9) for sources qualifying as non-operated major NOx sources.

[Rule 2012]

[Devices subject to this condition: D1, D8, D15, D22]